

REMARKS

After the foregoing amendment, claims 1 – 19 and 21 are currently pending in this application. Based on the June 16, 2009 notice, the March 13, 2006 amendments are entered. Accordingly, all deletions and additions to the claims made by way of the March 13, 2006 amendment were made prior to preparing the foregoing amendment. And the status identifiers indicate the status of the claims as if the March 13, 2006 amendment was entered. Claim 2 is amended to correct the preamble. Claim 2 depended from claim 1 but claim 1 is withdrawn. To obviate and issues as to matters of form, claim 2 is amended to be independent and recite the steps it previously incorporated by reference to claim 1. Claim 21 is also amended to correct grammar. Support for the amendments can be found in the originally filed specification and claims. Applicant submits that no new matter has been introduced into the application by these amendments.

Applicant repeats its March 13, 2006 response to the rejections, with updates to reflect the amendments herein, below.

Claim Rejections - 35 USC §103

Farah and Greene

The Action rejects claims 2 and 18 – 21 as obvious over Farah (U.S. patent No. 4,912,951) in light of Greene (U.S. patent No. 3,281,951). Claim 20 is canceled and its rejection is moot.

The Action admits that the “instantly claimed process for obtaining a cellulosic membrane from a wet sheet differs from the process of the Farah patent ... by claiming a wet sheet drying procedure or apparatus used to dry the cellulosic wet sheet to obtain the cellulose membrane.” According to the Action, Greene “discloses a film drying process and apparatus ... which suggests that the instantly claimed process for obtaining cellulosic membrane from a wet sheet is well known in the art.”

Claim 2 depends from claim 1, which, as amended, recites:

A process used to obtain cellulosic wet sheet comprising:
... wherein the cellulosic wet sheet is permeable to gases and impermeable to liquids.

Underline emphasis added. And claim 2, as amended, recites:

The process of claim 1, further comprising:

g) in one extremity of the wet sheet, applying two rectangles of an absorbent material by pressure, a first of the two rectangles of absorbent material applied to a first side of the wet sheet and a second of the two rectangles of absorbent material applied to a second side of the wet sheet so as to obtain a semi-rigid end that will not adhere to the drying material;

h) inserting the extremity in drying equipment through an idling roller and introducing the extremity between two pairs of draining cylinders, and from there to a pair of conveyor belts, pressing the wet sheet between these belts with increasing force (from 0.5 to 8 kgf/cm²) applied by a series of spaced apart small rollers heated by hot water that circulates in the small roller axles; and passing the wet sheet to a pair of finishing cylinders, which may or may not be heated to create a smooth surface for the membrane;

i) forwarding the membrane formed by the drying of the wet sheet to a coiling device where the product is coiled.

Underline emphasis added. As shown by underlining, drying is carried out i) by pressing the wet sheet between belts that apply increasing pressure and ii) by heat. The pressure is contributed by a series of “space apart small rollers.” In contrast, Greene states:

The invention in general contemplates the placement of a plurality of dryer rolls closely adjacent each other whereby the web may pass from one dryer roll directly to the next without being at any point unsupported....

Greene, column 2, lines 35 – 39. And Greene teaches that leaving the web unsupported is impracticable:

in a practical case the use of a belt for this purpose is unacceptable because the belt must be of an impracticably great length in order to be effective.

Greene, column, 1, lines 49 – 52. Finally, as shown in Green, the rollers taught are very large in order to provide “a plurality of dryer rolls closely adjacent each other...” See Greene, Figure 1.

Greene does not to teach “a pair of conveyor belts, pressing the wet sheet between these belts with increasing force (from 0.5 to 8 kgf/cm²) applied by a series of spaced apart small rollers heated by hot water ,” as recited in claim 2, as amended. And Greene teaches away from the claimed invention by teaching that such a configuration is impracticable.

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In addition, to the deficiencies of Green, Farah states that the material produced is air and water permeable. See Farah, column 3, line 67 – column 4, line 3; and column 6 (claim 1), line 32. But claim 2, as amended, recites: “the cellulosic wet sheet is permeable to gases and impermeable to liquid.” Taken together, Greene and Farah fail to teach every element of claim 2.

Claims 18 – 19 and 21 depend from claim 2 and Farah and Greene, thus, also fail to teach all of the elements of any one of these dependent claims. Green also teaches away from the invention recited in claims 18 – 19 and 21.

Based on the foregoing, Applicant believes that the rejection is overcome and the combination of Farah and Greene does not render the invention recited in any one of claims 2, 18, 19, and 21 obvious. Applicant requests withdrawal of the rejection of claims 2, 18, 19, and 21 under 35 U.S.C. §103 over Farah in view of Greene.

Iguchi and Greene

The Action rejects claims 2 and 18 – 21 as obvious over Iguchi (JP408035155A) in light of Greene (U.S. patent No. 3,281,951). Claim 20 is canceled and its rejection is moot. Applicants’ remarks above are incorporated herein.

The Action admits that the “instantly claimed process for obtaining a cellulosic membrane from a wet sheet differs from the process of the ... Iguchi et al.

publication by claiming a wet sheet drying procedure or apparatus used to dry the cellulosic wet sheet to obtain the cellulose membrane.” According to the Action, Greene “discloses a film drying process and apparatus ... which suggests that the instantly claimed process for obtaining cellulosic membrane from a wet sheet is well known in the art.”

As set forth above, Greene fails to teach “a pair of conveyor belts, pressing the wet sheet between these belts with increasing force (from 0.5 to 8 kgf/cm²) applied by a series of spaced apart small rollers heated by hot water,” as recited in claim 2. In addition, Greene teaches away from the claimed process.

Iguchi teaches fermenting in open containers and then disintegrating the cellulosic mass made. Subsequently, the gel made can be dried by various processes. In contrast, claim 1, upon which claim 2 depends, recites fermentation in “covered fermentation trays.” And instead of disintegrating the formed sheet, claim 1 recites: “e) collecting cellulose wet sheets that are thus formed, varying from 0.25 to 200 mm in thickness; and

f) forwarding the cellulose wet sheets to a whirlpool tank where they are purified and whitened according to the following sequence: rinsing, washing with sodium hydroxide 1 to 5%, rinsing, washing with 1 to 5% sodium lauryl sulfate and final rinsing.” Claim 2 then recites further steps of processing the sheets without disintegration. Iguchi teaches away from the claimed invention and fails to teach all of the elements of claim 2.

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Claims 18 – 19 and 21 depend from claim 2 and Iguchi and Farah, thus, also fail to teach all of the elements of any one of these dependent claims. Both Iguchi and Green also teach away from the invention recited in claims 18 – 19 and 21.

Based on the foregoing, Applicant believes that the rejection is overcome and the combination of Iguchi and Greene does not render the invention recited in any one of claims 2, 18, 19, and 21 obvious. Applicant requests withdrawal of the rejection of claims 2, 18, 19, and 21 under 35 U.S.C. §103 over Iguchi in view of Greene.

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Conclusion

If the Examiner believes that any additional matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicant respectfully submits that the present application, including claims 1 – 19 and 21, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

Levy et al.

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